News from Near and Far

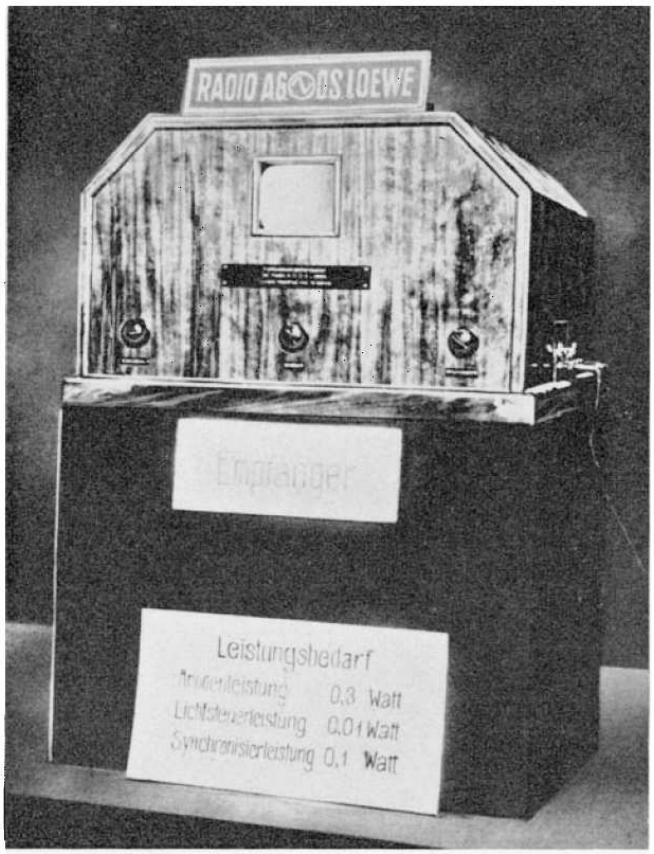
Training Levy and Grants for 1971-72

The Engineering Industry Training Board has now proposed to Mr. Robert Carr, Secretary of State at the Department of Employment, that the first £35,000 of the payroll of each registered establishment in its scope should be exempt from levy for the year beginning 1st September 1971. Above £35,000 the $2\frac{1}{2}\%$ liability will continue.

From nearly half the 25,000 firms on the Board's register no levy would then have to be collected (an administrative saving) and each of the remaining firms would be liable to pay a reduced amount, 'netted' as previously against grants earned. The firms that would be exempted employ between 3% and 4% of the industry's personnel. Firms paying no levy would still be able to claim grant at the full rate for certain training activities.

Levy exemption at present begins at £7,500 of payroll, with only 1% liability on the next £10,000. The new proposal replaces one made to Mr. Carr earlier in the year to exempt the first £25,000 of each payroll.

The Board has also increased from £504 to £600 the 'specific' grant for approved first-year off-the-job training given to a craftsman, prior to his entry to the 'module' system, or to a technician. The present levy-grant scheme otherwise remains, with only minor modifications, for the year beginning 1st September 1971.



The first television receiver with a cathode-ray tube display (Braun tube).

Israel's Electronics Industry

Within the space of a single decade electronics in Israel has grown from the production of radio receivers, using some imported parts, into a major industry with a capability for designing, developing, and manufacturing a wide range of intricate and sophisticated products for industrial, medical, laboratory, and security application. The industry has grown from about IL 5 M of production in 1960 to IL 420 M in 1970, excluding 'entertainment' aspects such as television sets and transistor radios. By 1975 the output should reach IL 1100 M and the number of employees double to 18,000; about 70% of the output goes to the defence effort.

In Israel some sixty-five electronics enterprises are in operation, although only five or six are large-scale projects, controlling about 85% of the total production. About 9,000 people, including a thousand qualified engineers and technicians, are employed in the industry; in some factories 65% of the labour force are women. There are five principal categories of products: telecommunications equipment; instrumentation, including medical, nuclear, and laboratory; industrial control systems; computers and peripheral equipment; and components.

A decisive advantage which Israel enjoys, at least for the time being, is the fact that technological capability is available at a cost far lower than in the U.S., and somewhat below costs prevailing in West European countries.

Several of the outstanding electronic enterprises in Israel are either subsidiaries of great international concerns, sometimes in partnership or in association with Israeli groups, or local companies operating with foreign licensing agreements.

The export of electronic equipment from Israel began in 1965. By 1970 the industry had achieved export sales of $16 300 000, and it is anticipated that by 1975 a volume of $100 million will be attained. The export products comprises mainly communications equipment, magnetic storage disks, special instrumentation, and components.

Communications equipment exports are directed largely at the new markets opening up in the developing countries of Africa and Asia. Israeli companies are beginning to set up factories in these countries for the production of communication equipment in partnership with local manufacturers. Sophisticated instruments and components can only be sold in countries with highly skilled industries, such as the United States and in Western Europe.

An Anniversary in Television Development

Forty years ago, on 25th April 1931, television with cathode-ray tubes was first demonstrated in public. At that time, on the invitation of Dr. Siegmund Loewe, the founder of Loewe Opta GmbH, a small group of technical journalists attended a demonstration in Berlin-Lichterfelde. On a television screen no bigger than 10 × 10 cm, test pictures transmitted with mechanical scanning by the German Post Office were shown and also a film. The accompanying picture shows the domestic television receiver developed from this apparatus by the then Radio AG D. S. Loewe and demonstrated on 21st August 1931 at the Berlin Radio Exhibition. This model had a screen size 8 × 9 cm and the definition was 100 lines. Professor Manfred von Ardenne, one of the pioneers of cathode-ray tube design, was associated with this first demonstration of electronic television. It is interesting to recall that A. A. Campbell Swinton proposed the use of such a device in his famous letter to *Nature* on 'Distant electric vision' in 1908, and in his subsequent Presidential Address to the Röntgen Society in 1911, but its realization had to await the development of tube technology.